


3/2/2018

Print



Dart Hawkesbury  
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada  
Tel (613) 632-5200

## Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	
PO038983	ACI001-VC	11	1	Net 30	M303B1.000X03.000	303 Bar 1" X 3' : MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE receive ft				24	2/28/2018	24		S047255	Stock	3/2/2018	\$ 74.41 / ft	0		
		12			M303B1.000X1.000	M303B1.000 X 1.000 : MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE receive ft						26		S047256	Stock	3/2/2018	\$ 20.94 / ft	0		
		23			MT-4140-B-1.000X6.250 	4140 Steel Bar 1.000 X 6.250 : AISI 4140N STEEL BAR PER MIL-S-5626, AMS 6382, AMS 6349, AMS 6529 receive ft				4		4		S047257	Stock	3/2/2018	\$ 61.25 / ft	0		
Total:										52		54								

Plex 3/2/2018 1:04 PM Dart.Dubois.Pascal



# DELIVERY - CLIENT

Copy

CO00073293

**ACIER OUELLETTE INC.**  
935, Boul. du Hâvre  
Salaberry de Valleyfield (Québec) J6S 5L1  
Tél.: 450-377-4248 Mtl.: 514-336-4248 Ext.: 800-667-4248  
Fax: 450-377-5696 Mtl.: 514-336-4246 Ext.: 866-456-4242

## Billed to

DART AEROSPACE LTD  
1270, ABERDEEN ST.  
HAWKESBURY, Ontario, K6A 1K7

## Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M

Delivery Route 5

Customer N°	CLI0001056
Date	2018/02/08
Delivery date	2018/03/02
Your order N°	038983
Processed by	Josianne Bourdon
Salesman	
Carrier	OUELLETTE VALLEYFIELD
Credit Terme	Net 30 Days
Page	1

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
1 FLAT SS 1 X 3 SS303 NS FSS-13303 9735 2 X 12' R/L HEAT: E274980 AC13480-SM-21/02	246.00	24.00	PL \$CLB		2x11'10"	<del>24</del>	24				DAS 11 9-89
2 SQUARE SS 1 SS303 NS CSS-1303 9512 2 X 12' R/L HEAT: 67705071 AC13455-SM-15/02	81.60	24.00	PL \$CLB		2x13'	26	26				DAS 11 9-89
3 PLATE 4140 HT 1 RANDOM NS P4140-1H-V 8796 1 X 6 1/4" X 48" HEAT: 301054 ac13456-FU-21/02	84.95	2.08	PI2 \$CLB		1x6 1/4" x 48"	4	4				DAS 11 9-89

Total Weight (lbs) : 412.55

NIR : R-109516-6

**Conditions :**  
All solid and delivered materials remain the property of "Acier Ouellette Inc." until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By : CL/Ric

Verified By : AM

Delivered By : VJ

Time

Customer's Signature

Date

Total (\$CAD)



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# **PURCHASE ORDER** **PO038983**

**Supplier:** ACI001-VC  
Acier Ouellette Inc.  
935 Boul. Du Havre  
Valleyfield  
QC  
J6S 5L1 Canada  
Phone: 800 667 4248  
Fax: 450 377 5696

**PO No:** PO038983

**PO Date:** 2/7/18

**Due Date:** 2/12/18

**Purchase Order**

**Revision:**

**Revision Date:**

**Ship-To Contact:** Lacelle, Linda  
Phone: llacelle@dartaero.com

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground

**Pymt Terms:** Net 30

**Freight Terms:**

**Special Comments:** quotation sou0084311

*REVISES*

## Items

Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
11	M303B1.000X03.000		303 Bar 1" X 3' : MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE receive ft	Firmed	2/28/18	24 ft	0 ft	24 ft	\$74.41/ft	\$1,785.84
						24'				
									MAR 02 2018	
									DAS	
									11	
									9-89	
12	M303B1.000X1.000		M303B1.000 X 1.000 : MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE receive ft	Firmed	2/28/18	24 ft	0 ft	24 ft	\$20.94/ft	\$502.56
						26'				
									MAR 02 2018	
									DAS	
									11	
									9-89	
23	MT-4140-B- 1.000X6.250		4140 Steel Bar 1.000 X 6.250 : AISI 4140N STEEL BAR PER MIL-S- 5626, AMS 6382, AMS 6349, AMS 6529 receive ft	Firmed	2/28/18	4 ft	0 ft	4 ft	\$61.25/ft	\$245.00
						4'				
									MAR 02 2018	
									DAS	
									11	
									9-89	

Items										
Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
25	M304S16GA		304/316 Sheet .063 : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S- 5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 receive sf	Firmed	2/26/18	96 sf	0 sf	96 sf	\$6.50863/sf	\$624.83
<p><b>Line Item Note</b> replacement mat'l need credit for line #1 mat'l was not to spec's</p>										<b>Grand Total: \$3,158.23</b>
Order Notes										
<p>Procurement Quality Clauses  A005 right of entry  A012 chemical and physical test report  A016 personnel qualification  A017 raw material identification (as applicable)  A026 certification of material conformance  A041 quality management system  A042 dart notification by supplier  A043 retention of quality documents    A048 counterfeit parts avoidance, detection, mitigation and disposition program    A049 supplier awareness</p> <p>Terms &amp; Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit <a href="http://www.dartaerospace.com">www.dartaerospace.com</a> for further explanation.</p>										

96<sup>sf</sup>  
DAS  
11  
9-20  
FEB 23 2018

CL

Plex 2/23/18 9:01 AM dart.lavoie.chantal



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# **PURCHASE ORDER** **PO038983**

**Supplier:** ACI001-VC  
Acier Ouellette Inc.  
935 Boul. Du Havre  
Valleyfield  
QC  
J6S 5L1 Canada  
Phone: 800 667 4248  
Fax: 450 377 5696

**PO No:** PO038983

**PO Date:** 2/7/18

**Due Date:** 2/12/18

**Purchase Order**

**Revision:**

**Revision Date:**

**Ship-To Contact:** Lacelle, LindaPhone:  
llacelle@dartaero.com

**E-Mailed**

**FEB 09 2018**

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground

**Pymt Terms:** Net 30

**Freight Terms:**

**Special Comments:** quotation sou0084311

**REVISED**

## **Items**

Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	M304S16GA		304/316 Sheet .063 : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 receive sf	Firmed	2/12/18	96 sf	0 sf	96 sf	\$6.508625/sf	\$624.83
						96			<b>FEB 13 2018</b> <b>FEB 14 2018</b>	
2	M304S18GA		304/316 .050 Sheet : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240	Firmed	2/12/18	256 sf	0 sf	256 sf	\$5.355/sf	\$1,370.88
						256			<b>FEB 13 2018</b>	
3	M304S20GA		304/316 .040 Sheet : MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 receive sf	Firmed	2/12/18	96 sf	0 sf	96 sf	\$3.90854/sf	\$375.22
						96			<b>FEB 14 2018</b>	
5	M6061T6S.040		6061-T6 .040 Sheet : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed	2/12/18	96 sf	0 sf	96 sf	\$3.6648958/sf	\$351.83
						96			<b>FEB 14 2018</b>	

**FEB 14 2018**

**DAG**  
**11**  
**9-00**

Items										
Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
6	M6061T6S.063		6061-T6 .063 Sheet : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed	2/12/18	96 sf	0 sf	96 sf	\$5.6397916/sf	\$541.42
							96		FEB 14 2018	
7	M6061T6S0.250X6.250		6061-T651 Sheet 0.250" Thick Plate x 6.250" Wide	Firmed	2/12/18	6 ft	0 ft	6 ft	\$16.508333/ft	\$99.05
							6		FEB 14 2018	
8	M6061T6B1.000X04.000		6061-T6 Bar 1.00 X 4.00 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	2/12/18	12 ft	0 ft	12 ft	\$13.245833/ft	\$158.95
							12		FEB 14 2018	
9	M6061T6B1.000X8.000		6061T6 Bar 1.000 X 8.000 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	2/12/18	12 ft	0 ft	12 ft	\$24.994166/ft	\$299.93
							12		FEB 14 2018	
10	M6061T6B1.000X06.000		6061T6 Bar 1.00 X 6.00 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	2/12/18	36 ft	0 ft	36 ft	\$19.451666/ft	\$700.26
							36		FEB 14 2018	
11	M303B1.000X03.000		303 Bar 1" X 3' : MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE receive ft	Firmed	2/16/18	24 ft	0 ft	24 ft	\$74.41/ft	\$1,785.84
12	M303B1.000X1.000		M303B1.000 X 1.000 : MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE receive ft	Firmed	2/16/18	24 ft	0 ft	24 ft	\$20.94/ft	\$502.56

DAG  
14  
9:30  
FEB 14 2018

## Items

Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
13	M304B1.000X2.500		304 Bar 1.000 X 2.500" : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	2/12/18	12 ft	0 ft	12 ft	\$30.255833/ft	\$363.07
14	M304B2.500X02.500		304 Bar 2.500 X 2.500" : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	2/12/18	12 ft	0 ft	12 ft	\$80.75/ft	\$969.00
15	M304B0.625X4.000		304 Bar 0.625 X 4.000" : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	2/12/18	4 ft	0 ft	4 ft	\$48.105/ft	\$192.42
16	MT-4140QT-R1.375		MT-4140 QT-R1.375 : MAT'L: AISI 4130 QUENCHED & TEMPERED ROUND BAR AS PER ASTM 4140 QT OR ASTM 4142 QT	Firmed	2/14/18	20 ft	0 ft	20 ft	\$9.3885/ft	\$187.77
17	M303R0.250		303 Round Bar 0.250"	Firmed	2/12/18	12 ft	0 ft	12 ft	\$0.57583/ft	\$6.91
18	M6061T6TS1.250W.120		6061T6 Sq Tube 1.250 X 1.250 X.120W : MATERIAL: 6061-T6 OR 6061- T651/T6510/T6511/T62 SQUARE TUBING AS PER AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR PER AMS-QQ-A-200/8 OR AMS 4160 receive ft	Firmed	2/12/18	20 ft	0 ft	20 ft	\$1.4615/ft	\$29.23
19	M2024T3S.040		2024-T3 .040 Sheet : MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209	Firmed	2/12/18	48 sf	0 sf	48 sf	\$5.601875/sf	\$268.89
20	M1018R1.00		1018-1025 Round Bar 1.00 : MATERIAL: AISI 1018- 1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM A108 receive ft	Firmed	2/12/18	20 ft	0 ft	20 ft	\$2.6685/ft	\$53.37

FEB 14 2018

DAS  
11  
0.39

Items										
Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
21	MT-4140QT-R1.000		AISI 4140 Quenched & Tempered Steel Round Bar 1.000" Dia.	Firmed	2/12/18	8 ft	0 ft	8 ft	\$4.78875/ft	\$38.31
							8		FEB 14 2018	
22	MT-4140QT-R0.625		AISI 4140 Quenched & Tempered Steel Round Bar 0.625" Dia.	Firmed	2/14/18	100 ft	0 ft	100 ft	\$2.8782/ft	\$287.82
							90		FEB 14 2018	
23	MT-4140-B-1.000X6.250		4140 Steel Bar 1.000 X 6.250 AISI 4140N STEEL BAR PER MIL-S-5626, AMS 6382, AMS 6349, AMS 6529 receive ft	Firmed	2/22/18	4 ft	0 ft	4 ft	\$61.25/ft	\$245.00
24	MT-A513-T-0.750W0.085		A513 Seamless Alloy Steel Round Tubing 0.75"dia. x 0.085" Wall	Firmed	2/14/18	20 ft	0 ft	20 ft	\$3.60/ft	\$72.00
							23		FEB 14 2018	

Line Item Note 0.083"wall acceptable

Grand Total: \$9,524.50

## Order Notes

## Procurement Quality Clauses

A005 right of entry  
A012 chemical and physical test report  
A016 personnel qualification  
A017 raw material identification (as applicable)  
A026 certification of material conformance  
A041 quality management system  
A042 dart notification by supplier  
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit  
[www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Plex 2/9/18 1:48 PM dart.lavoie.chantal

FEB 14 2018

DAS  
11  
9-89



**ACIER OUELLETTE INC.**

935, Boul. du H vre  
Salaberry de Valleyfield (Qu bec) J6S 5L1  
T l.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248  
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

**Quotation****SOU0085398****Billed to**

DART AEROSPACE LTD  
1270 , ABERDEEN ST.  
HAWKESBURY, Ontario, K6A 1K7

**Shipped to**

, Ontario,

Att : CHANTAL LAVOIE T l.: 613-632-5200

**Customer N ** CLI0001056  
**Date** 2018/02/09  
**Revision N ** 0  
**Prices valid until** 2018/02/16  
**Your Order N ** 038983  
**Processed by** Josianne Bourdon  
**Salesman** JOSIANNE  
**Carrier** OUELLE SDV  
**Credit Terms** Net 30 Days  
**Page** 1

Product N� and description	Weight	Qty	U/M	Qty	U/M	Price	Pcs Nb	Price	Amount
ROUND 4140 HEAT TREAT 5/8 RANDOM R4140-58H-V 4977 5 X 20' R/L 2-3 DAYS	104.30	100.00	PI_\$CLB	100.00	PI		5.00	57.564	287.82
SURCHARGE ENERGETIQUE FRAIS_ENERGETIQUE			\$						3.95

**Total Weight (Lbs)** 104.30

**Important**

This offer is based on availability and current pricing conditions that may be revised upon reception of the order.

This offer is subject and conditional to credit approval.

Approved and Accepted by : \_\_\_\_\_

Date : \_\_\_\_\_

**Sub-total** 291.77

TVH-13   37.93

**Total (\$CAD)** 329.70

CO. 73293  
PART

PO: 13480

# MONTANSTAHL

special profiles in steel

Tel.: +41 (91) 6416-875  
Fax.: +41 (91) 6416-804  
Email: qualita@montanstahl.com

Certified by TÜV SÜD Management Service GmbH according to:  
ISO 9001:2008, with certificate N° 12 100 8402 TMS AD  
2000-Merkblatt W0  
PED (2014/68/EU), with certificate 41/2003/MUC Annex I,  
Section 4.3  
CPR 305/2011, Certificate N° 0036-CPR-M-63-2013  
EN 1090-1:2009, Certificate N° 0036-CPR-EN1090-1-00437  
TÜV SÜD.2016.001

MONTANSTAHL AG, Via Gerrette 4, CH-6855 Stabio

Company

STAINLESS STRUCTURALS LLC  
575 Conroe Park West Drive  
USA 77303 CONROE

## Inspection certificate EN 10204 3.1

Certificate no.  
72524-00

Product Flats - ACD 1x3 inch, 11'-13'		Execution ACD													
Grade AISI 303 - UNS-S-30300 ASTM A582/A582M-AMS5640 U type 1		Melting EAF/AOD													
Size standard AMS 2241S	Product standard	Order confirmation no.	Invoice no.												
Your order	Your order position	Your article no.	Net weight 1986 lbs												
Bundles 1295100.1295111															
Heat E274980	C	Si	Mn	P	S	Ni	Cr	Mo	Ti	Al	N	Cu	Pb	V	Co
	0.055	0.59	1.64	0.028	0.254	8.60	17.78	0.34			0.020	0.60			0.096
Heat E274980	Tensile strength Rm		Yield strength Rp 0.2% Rp 1%		Elongation A5		Area reduction Z		Hardness HB		Impact test KV				
	103 ksi		61 ksi		45 %		55 %		175						

- We hereby confirm that the material certified in this document is conform to enclosed data sheet
- Material is produced in compliance with ROHS (2002/95/EC)
- Material free from Mercury, Cadmium and radioactive contamination
- Micro and Macro structure: OK
- No weldings or weld repair
- The delivery is in accordance with the order

- Country of melt: Germany
- Country of manufacturing origin: Switzerland

\* Supplier's analysis

Manufacturer's symbol



Date 26.05.2017

Quality department

Andrea Bevilacqua

Authorized inspector:

*Bevilacqua Andrea*

CO. 73293  
DART

**BOLLINGHAUS<sup>®</sup>**  
**STEEL**

Bollin aus Steel, SA  
DIN EN 9001:2008  
TÜV CERT 01 100 030458

Abnahmeprüfzeugnis/Nil Test Certificate/Certif. de Qualidade

EN 10204:2004 / 3.1

No.: / Nr.: / Nr.:

0000132769

Unsere Innere Verweisung / Our Int. Ref. / Int. Ref.

5600036895 000040

Datum / Date / Data

30.08.2017

Normen / Standards / Normas

TYPE 303/UNS S30300 acc. to ASTM A582/A582M-12e1, ASTM A314-16, ASTM A320/A320M-16a, ASTM F899-12b, ASTM A370-17, ASME SA320/SA320M, ASME SA370, TYPE 1 acc. to AMS 5640V, ASTM A484/A484M-16, Sulphur 0.28-0.30 %  
ASME specifications versions 2015 Section II Part A.

Kunde / Customer / Cliente

Endgültiger Kunde / Final Customer / Cliente Final

Bestell Nr./Order Nr./ Enc.Nr.

Bestell Nr./ Order Nr./ Enc.Nr.

Produktgruppe / Product Group / Grupo Produto

Gewicht / Weight / Peso

Bunde / Bundle / Atados

AISI 303 CD SQ 1"

5.349 lb

05

Werkstoff-Nr.

Material-no.

Qualidade

1.4305

Werkstoff-Normbezeichnung / Material standard grade / Norma do material

X 8 CrNiS 18-9

Beschreibung / Description / Descrição

Stainless steel cold drawn square bars

US DFAR 252.225-7009; MELT SOURCE: France / MFG: Portugal.

Schmelzer Nr.  
Cast nr. / Fusão nr.

Chemische Analyse in % / Chemical composition in % / Análise química em %

67705071

C

0.054

Si

0.401

Mn

1.684

P

0.035

S

0.289

Cr

17.144

Ni

8.285

EAF+AOD

Mo

0.349

Co

0.114

Cu

0.516

N

0.030

Ti

0.001

-

-

-

-

Proben Nr.  
Test no.  
Amostra no.

ASTM E399

Kerbschlagarbeit  
Impact Test

Rachência

(Charpy V)

[J]

Streckgrenze  
Yield point

Tensão limite

Rp 0.2 %

[Ksi]

Dehngrenze  
1% point

Limite de extensão

Rp 1.0 %

[Ksi]

ASTM A370

Zugfestigkeit  
Tensile strength

Tensão de rotura

Rm

[Ksi]

Dehnung  
Elongation

Aalongamento

A5 - 4D

[ % ] [ % ]

Erweichung  
Reduction of area

Coef. Estricção

Z

[ % ]

3083919.02.01

74.0

81.1

107.0

41.5

44.3

60.4

Visuelle Kontrolle  
Visual inspection  
Inspeção visual

☒

Ok

ASTM E10

Härte  
Hardness

Durezza

210

[ HB ]

Korrosionsbeständigkeit  
IC Test

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Corrosão Intermetálica

Wärmebehandlung  
Heat treatment

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Tratamento térmico

Annealed Quenched 1800 °F (1050 °C)

(water quenched)

Nuno Silva (D-NS)

Bollinghaus Steel, SA

Bemerkungen / Remarks / Observações

Country of origin: Portugal. No weld repair done.

Material is free of mercury and radiation contamination.

Hiermit bestätigen wir, dass das Material der oben genannten

Spezifikation entspricht.

We confirm that this material meets the specification according

the mentioned standards.

Confirmamos que este material respeita as especificações

de acordo com as normas referidas.

Dart

CO 73293

AC. 13476

<b>Chemical certification</b> <b>Certification chimique</b>
--

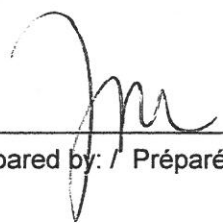
Order Num / No. Commande <b>AC-13456</b>	Vendor / Fournisseur <b>46</b>	Country of origin / Pay d'origine <b>SLOVENIA</b>	Date <b>08/31/17</b>	Heat / soudée <b>301054</b>	Material ID # / No. matériel
Grade / Nuance <b>4140 PLT</b>	Conditions <b>HEAT TREATED</b>				
Shape / Forme <b>FLAT</b>	Size / Dimension <b>1.000</b>	Specifications <b>ASTM A829/A829M</b>			

Chemical composition / Analyse chimique				
Carbon (C)	Silicon (Si)	Manganese (Mn)	Phosphorus (P)	
Mini / maxi 0.3700 / 0.4400	0.1500 / 0.3500	0.6500 / 1.1000	0.0100 / 0.0190	
Actuel % <b>0.400</b>	<b>0.300</b>	<b>0.780</b>	<b>0.009</b>	
Sulphur (S)	Chromium (Cr)	Nickel (Ni)	Molybdenum (Mo)	
Mini / maxi 0.0200 / 0.0400	0.7500 / 1.2000	0.1000 / 0.2000	0.1500 / 0.2500	
Actuel % <b>0.000</b>	<b>0.970</b>	<b>0.210</b>	<b>0.170</b>	
Copper (Cu)	Vanadium (V)	Aluminum (Al)	Tungsten (W)	
Mini / maxi 0.1900 / 0.2900	0.0400 / 0.0500	0.0000 / 0.0000	0.0000 / 0.0000	
Actuel % <b>0.249</b>	<b>0.036</b>	<b>0.050</b>	<b>0.000</b>	
Cobalt (Co)	Titanium (Ti)			
Mini / maxi 0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000	0.0000 / 0.0000
Actuel % <b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
Mechanical properties / Propriétés Mécaniques				
Yield strenght / Élasticité	Tensile / Rés. à la traction	Elongation / Allon. (%)	Red. of area / Surface (%)	RC
<b>0.000 PSI</b>	<b>0.000 PSI</b>	<b>0.00</b>	<b>0.00</b>	<b>313 BHN</b>

**Note:**

We certify that the above data has been verified and are conform to an original mill or supplier certificate supplied to us with the material

Nous certifions que les données ci haut on été vérifier et sont conformes d'après un certificat originale qui nous a été fourni par notre fournisseur.

  
 Prepared by: / Préparé par:

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-4140-B-1.000X6.250

PO / BATCH NO.: 038983/5042257

DATE: MAR 02 2018

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 4'  
 QUANTITY INSPECTED: 4'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.000  
 THICKNESS RECEIVED: 1.000  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
CORROSION	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	<u>Astm A829</u>
CORRECT THICKNESS	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
PHOTO REQUIRED	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	<u>Heat # 301054</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="radio"/> Y	<input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS</u> <u>71</u> DATE: <u>9-89 MAR 02 2018</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

## SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL : AISI 4140 / 4142 STEEL SHEET OR PLATE  
MINIMUM ROCKWELL C = 28 Rc  
MAXIMUM ROCKWELL C = 32 Rc

SPECIFICATION: ASTM A829, AMS 6395

PART NUMBER: MT-4140-S-(T.TTT) x (W.WWW)  
WHERE "T.TTT" = THICKNESS IN INCHES  
WHERE "W.WWW" = WIDTH IN INCHES (OPTIONAL FOR SPECIFYING CUT PLATE)

EX. 0.063" THICK SHEET = MT-4140-S-0.063  
EX. 3.5" WIDE BY 0.500" THICK PLATE = MT-4140-S-0.500X3.500

REV.	DESCRIPTION	ECN #	DATE	BY	REV
A	NEW ISSUE	18-544	18.2.13	VM	ML

<b>DART</b> AEROSPACE		Hawthornby, Ontario, Canada	
TITLE AISI 4140 / 4142 STEEL SHEET OR PLATE			
PART NO.	MT-4140-S	REV	A
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES DIMENSIONS APPLY AFTER FINISHING			
DESIGNED BY:	VM 2/13/2018	TOLERANCES:	FRACTIONS 1/8
DRAWN BY:	VM 02/13/2018	DECIMALS	1/10
CHECKED BY:	VM 02/13/2018	ANGLES	1/16
MFG REVIEW BY:	DD 02/13/2018	ROUNDS	1/16
APPROVED BY:	ML 02/14/2018	SCALE: NTS	SHEET 1 OF 1
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS NOT TO BE USED FOR ANY PURPOSES OR COPIED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303B1.000X1.000  
 DATE: MAR 02 2018

PO / BATCH NO.: 038983/5047256

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 26'  
 QUANTITY INSPECTED: 26'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.000  
 THICKNESS RECEIVED: 1.000  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	(Y)	N	Astm A582
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	Heat # 67705071
CORRECT MATERIAL IDENTIFICATION	(Y)	N	
CORRECT M# ON THE MATERIAL	(Y)	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u> <u>11</u>	SIGNED OFF BY: _____		
DATE: <u>9-89</u> <u>MAR 02 2018</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 303 SS BAR  
(NOTE: AISI 304/816 NOT ACCEPTABLE)

SPECIFICATION:

ASTM A582  
M303B1T.1TT X1WW.WWW  
THICK | WIDTH

PART NUMBER:

WHERE "T.1TT" = THICKNESS IN INCHES  
AND "WW.WWW" = WIDTH IN INCHES

EG. 0.5" x 3.0" BAR = M303B0.500X03.000

RELEASED  
R 2010-02-02  
MR

B	REFORMAT DWG. ADD SPECS (ZN D8-1), REF PAR 08-020A	CP	10.01.05
A	NEW ISSUE	DS	02.05.29
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.01.05		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M303B			
REV. B			
SHEET 1 OF 1			
TITLE 303 BAR			
SCALE NTS			
DATE 10.01.05			
COPYRIGHT © 2002 BY DART AEROSPACE LTD. THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. IT IS TO BE USED FOR ANY PURPOSE OR FOR ANY COMMERCIAL OR OTHER PURPOSE WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			



# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303BL000X03.000

PO / BATCH NO.: 038983/5047255

DATE: MAR 02 2018

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 24  
 QUANTITY INSPECTED: 24  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.000  
 THICKNESS RECEIVED: 1.000  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	Y (N)	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	Y (N)	
CORRECT MATERIAL PER M-DRAWING	Y (N)	<u>Astm A582</u>
CORRECT THICKNESS	Y (N)	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	Y (N)	<u>Heat # E274980</u>
CORRECT MATERIAL IDENTIFICATION	Y (N)	
CORRECT M# ON THE MATERIAL	Y (N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u>	SIGNED OFF BY: _____		
DATE: <u>9-39 MAR 02 2018</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 303 SS BAR  
(NOTE: AISI 304/316 NOT ACCEPTABLE)

SPECIFICATION: ASTM A582

PART NUMBER: M303B|T.TTT|X|WWW.WWWW|  
THICK|WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES  
AND "WWW.WWWW" = WIDTH IN INCHES

EG. 0.5" x 3.0" BAR = M303B0.500X03.000

RELEASED  
R 2010-02-02  
NPL

B	REFORMAT DWG. ADD SPECS (ZN D8-1).	CP	10.01.05
A	NEW ISSUE	DS	02.05.29
REV.	DESCRIPTION	BY	DATE
DESIGN	DART AEROSPACE LTD		
DRAWN	HAWKESBURY, ONTARIO, CANADA		
CHECKED	DRAWING NO.		REV. B
MFG. APPR.	M303B		SHEET 1 OF 1
APPROVED	TITLE		SCALE
DE APPR.	303 BAR		NTS
DATE	10.01.05		

COPYRIGHT © 2002 BY DART AEROSPACE LTD  
THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. IT IS  
NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED WITHOUT  
THE WRITTEN PERMISSION OF DART AEROSPACE LTD.